SECTION 8

8.24 CORROSION PROTECTION SYSTEMS:

- A. <u>Dissimilar Materials</u>: Cathodic protection and insulation shall be installed as required by Denver Water. Particular care shall be taken to insulate between dissimilar materials.
- B. <u>Insulating Joints</u>: Whenever it is necessary to join pipe of dissimilar metal, a method of insulating against the passage of electrical current, approved by Denver Water, shall be provided. Special care shall be exercised during the installation of these joints to prevent electrical conductivity across the joints. After the insulating joint installation is completed, Denver Water will test the joint. Should the insulated joint fail the test, it shall be removed, inspected and any necessary repairs made. The joint shall then be reinstalled and tested. This process shall continue until the joint is successfully tested. Typical insulated joints are shown on Sheet 35 of the Standard Drawings and 6.41, B.
- C. <u>Polyethylene Encasement Material</u>: All metallic pipe, joint restraint, fittings, tie rods and appurtenances regardless of soil resistively, shall be polyethylene in cased. The polyethylene encasement shall prevent contact between the pipe and bedding material, but is not intended to be a completely airtight and watertight enclosure.

Polyethylene pipe wrap material shall be applied to line pipe in the manner shown on Sheet 36 of the Standard Drawings, and 6.41. The polyethylene shall have a minimum thickness of 8 mils and conform to MS-13. A 2 inch wide 10 mil thickness polyethylene pressure-sensitive tape shall be used to close seams or hold overlaps. Prolonged exposure to sunlight will eventually deteriorate polyethylene film. Keep exposure to sunlight to a minimum.

Before Denver Water will tap a water main, the trench, pipe and polyethylene wrapping shall be in a state of readiness. Damage to polyethylene pipe wrap in the trench prior to and during backfill shall be repaired to the satisfaction of Denver Water. All damage to the pipe wrap caused by tapping the main shall be repaired by Denver Water.